

skilled in the art are intended to be included within the scope of the following claims. Δ

IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) A method for restoring a binary signal [(4, 8)], which can be transmitted via an optical transmission link exhibiting a distortion time, from a distorted binary signal [(1, 5), the optical transmission link exhibiting a distortion time, characterized by the following method steps] comprising:
- [-] determining time intervals [(Z1, Z2, ...) which in, each [case] including [comprise] at least twice the distortion time, [the] a clock rate of the binary signal [(4, 8) comprising] including an integral multiple of one time interval [(Z1, Z2, ...).];
 - [-] detecting an occurrence of level changes of the distorted binary signal [(1, 5)] in the time intervals [(Z1, Z2, ...).];
 - [-] determining level holding times [(Ph11, Ph21, Ph22, ...)] of the distorted binary signal [(1, 5) which in each case indicate how long] indicating an amount of time that a level remains unchanged within a time interval [(Z1, Z2, ...).]; and
 - [-] restoring the binary signal [(4, 8)] in the time intervals [(Z1, Z2, ...).];
 - [-] by transferring [the detected] a level of the distorted binary signal in the time intervals [(Z1, Z2, ...)] in which no level changes have [taken place] occurred in the distorted binary signal [(1, 5)], and
 - [-] by transferring [the detected] a level of the distorted binary signal in the time intervals [(Z1, Z2, ...)] in which level changes have [taken place] occurred, only

when the respective level holding times [(Ph11, Ph21, Ph22, ...)] reach a predeterminable value.

2. (Amended) The method as claimed in claim 1, [characterized in that the] wherein a type of distortion ["elongated or shortened Low or High pulse"], which can be determined in an identification mode of operation, is taken into consideration for weighting the level holding times [(Ph11, Ph21, Ph22, ...)], for restoring the binary signal [(4, 8)] in the time intervals [(Z1, Z2, ...)] in which level changes [took place] have occurred.

3. (Amended) The method as claimed in claim 1 [or 2], [characterized in that] wherein, after each level change, the subsequent time intervals [(Z1, Z2, ...)] are synchronized.

4. (Amended) A circuit arrangement for [carrying out the method as claimed in claim 1] restoring a binary signal, which can be transmitted via an optical transmission link exhibiting a distortion time, from a distorted binary signal, comprising [characterized by]:

[-] means for determining time intervals [(Z1, Z2, ...)] which in_i each [case comprise] including at least twice the distortion time, [the] a clock rate of the binary signal [(4, 8) comprising] including an integral multiple of one time interval [(Z1, Z2, ...)],_i

[-] means for detecting an occurrence of level changes of the distorted binary signal [(1, 5)] in the time intervals [(Z1, Z2, ...)],_i

[-] means for determining level holding times [(Ph11, Ph21, Ph22, ...)] of the distorted binary signal [(1, 5)] which in each case indicate how long] indicating an

amount of time that a level remains unchanged within a time interval [(Z1, Z2, ...),]; and

[-] means for restoring the binary signal [(4, 8)] in the time intervals [(Z1, Z2, ...)]

[-] by transferring [the detected] a level of the distorted binary signal in the time intervals [(Z1, Z2, ...)] in which no level changes have [taken place] occurred in the distorted binary signal [(1, 5)], and

[-] by transferring [the detected] a level of the distorted binary signal in the time intervals [(Z1, Z2, ...)] in which level changes have [taken place] occurred, only when the respective level holding times [(Ph11, Ph21, Ph22, ...)] reach a predeterminable value.

5. (Amended) The circuit arrangement as claimed in claim 4, [characterized in that] further comprising:

first means [are provided which take] for taking a type of distortion into consideration [the type of distortion "elongated or shortened Low or High pulse"], which is determined by the first means in an identification mode of operation, for weighting the level holding times [(Ph11, Ph21, Ph22, ...)], for restoring the binary signal [(4, 8)] in the time intervals [(Z1, Z2, ...)] in which level changes [took place] have occurred.

6. (Amended) The circuit arrangement as claimed in claim 4 [or 5], [characterized in that] further comprising:

means [are provided which] for, after each level change, [synchronize] synchronizing the subsequent time intervals [(Z1, Z2, ...)].